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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,275	09/25/2003	Stephen D. Hill	25.0225	6601

25576 7590 12/02/2005

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT PAPER NUMBER

3672

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/671,275	Applicant(s) HILL ET AL.	
	Examiner Giovanna M. Collins	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 15-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-15 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-6 is/are rejected.
- 7) ☒ Claim(s) 2, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of claims 1-15 in the reply filed on 9/6/05 is acknowledged.

***Claim Objections***

Claim 1 is objected to because of the following informalities: In line 9, the phrase "said valve element" should be changed to - - said dump valve element - -.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eslinger et al. 20020062963 in view of Hosie 6,209,663.

Eslinger discloses a method for controlling downhole operation of a multicycle dump valve mechanism of a straddle packer comprising positioning the straddle packer (28,30) and the dump valve mechanism (26) at a desired location with the valve element in the open position (paragraph 0024), closing the valve (paragraph 0025), and storing energy in spring (116), when the valve is in the closed position flowing fracture

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fluid through straddle packer to accomplish fracturing (paragraph 0025), after fracturing is complete using spring return to open valve to cause dumping of fluid (paragraph 0026) and then using spring to return valve to starting position to repeat process. Eslinger does not disclose an indexing mechanism. Hosie teaches an indexing mechanism allows a valve to stay open without having applied pressure acting on the tool. As it would be advantageous to be able to keep the valve open with a loss of applied pressure, it would be obvious to one of ordinary skill in the art to modify the method disclosed by Eslinger to have an indexing mechanism in view of the teachings of Hosie.

Referring to claims 3-4, Hosie, teaches (figs. 7 and 12-13) the indexing mechanism has a indexing sub having a indexing slot (246) and indexing lug (248) and an indexing sleeve (244) mounted for rotate about the slot which causing a valve mandrel to move from a starting position to an indexing position and returning the mandrel from an indexing position and causing the indexing slot to rotate the indexing sleeve to a position aligning the lug movement slot with the indexing lug and moving the mandrel in a closing direction and moving the indexing lug through the slot of the sleeve and closing a valve element (col. 11, line 45- col. 12, line 12).

Referring to claim 5, Hosie teaches the indexing mechanism has a indexing sub having a indexing slot (246) and indexing lug (248) and an indexing sleeve (244) mounted for rotate about the slot where moving a valve mandrel in the valve closing direction engaging the indexing sleeve and lug and restraining complete closure as lug moves through the indexing slot (see fig. 13).

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Referring to claim 6, Hosie teaches indexing the for valve closure by rating the indexing sleeve to a position aligning the lug movement slot with said indexing lug and causing a valve mandrel to a position locating a valve element in a seated relationship (col. 11, line 45- col. 12, line 12).

***Allowable Subject Matter***

Claims 2,7, and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 9-15 are allowed.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent 6,776,239 to Eslinger and Patent Publication Application 2004/0084187 to Costley et al. disclose methods of controlling dump valves with straddle packers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
gmc

  
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